

Popular Berkeley Lab X-Ray Data Booklet Reissued

X-ray scientists and synchrotron-radiation users who have been patiently waiting for an updated version of the popular *X-Ray Data Booklet* last published in 1986 by the Center for X-Ray Optics at the Lawrence Berkeley National Laboratory can breathe a sigh of relief. The venerable “little orange book” has now been reissued under the auspices of CXRO and the Advanced Light Source (ALS) with an April printing of 10,000 paper copies and the posting of a Web edition at <http://xdb.lbl.gov>.

David Attwood (CXRO), Janos Kirz (SUNY, Stony Brook), and Doug Vaughan (Berkeley Lab), the original editors of the x-ray data booklet, modeled their product after the even more venerable Particle Data Booklet, published by Berkeley Lab’s Particle Data Group. With a wealth of x-ray information packed into a shirt-pocket-sized format, the booklet was required reading at synchrotron beamlines around the world, where it was often seen labeled with the hopeful entreaty “Do not remove from beamline.” Some scientists were alleged to have secret stashes from which they carefully distributed copies to favored friends and colleagues. But the booklet has long been out of print.

The editorial torch has now been passed to Al Thompson (ALS) and Vaughan, who have overseen a major revamping of the entire booklet from beginning to end. The contents have been reorganized; tables and texts have been updated; and new chapters on emission energies, the history of synchrotron light sources, and useful x-ray formulae have been added. They have divided the data booklet into sections on the x-ray properties of the elements, synchrotron radiation, scattering processes, optics, and miscellaneous with several chapters of text and tables in each section. All of this was accomplished without significantly changing the length, now at 166 pages.

Available free of charge, the x-ray data booklet can be ordered directly from the Web site by clicking on the image of the cover and filling out the order form. In addition, scientists at ALS, APS, CHESS, NSLS, and SSRL can obtain a booklet at their user office.

Art Robinson
Berkeley Lab

[Captions]



Figure 1.
Cover of the new CXRO/ALS *X-Ray Data Booklet*, which is now back in print after having been updated and revised.



Figure 2.

Al Thompson (ALS) and Doug Vaughan (Berkeley Lab) were the editorial overseers of the *X-Ray Data Booklet* revision.